ABSTRACT OF THE DISCLOSURE

The present invention provides a waveform equalization controller which combines a follow-up property in the case where the distortion is varied and a higher convergence speed at the initial operation, and a higher stability at the low C/N time, and realizes a high performance and a low cost in a waveform equalizer. The waveform equalization controller which comprises a waveform equalizer 101 for reducing a transmission line distortion of an input signal on the basis of LMS algorithm and controls update of a tap coefficient comprises an error estimation unit 102 for estimating an error signal 102S from an output signal 101S of the waveform equalizer 101 and outputting the error signal 102S; a step size decision unit 104 for generating a step size 104S having an arbitrary size and outputting the step size 104S; and a coefficient updating amount calculation unit 103 for calculating a tap coefficient updating amount 106S on the basis of the error signal 102S, the step size 104S and a data 105S to be used for the tap coefficient update.

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